

## 510(k) SUMMARY

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### Submitter Information

Submitter's Name: OrthoHelix Surgical Designs, Inc.  
Address: 1065 Medina Rd, Suite 500  
Medina, Ohio 44256  
Telephone Number: 330-869-9562  
Fax Number: 330-247-1598  
Prepared By: Andy Leither, Simon Sjovold  
Contact Person: Derek Lewis  
Date Prepared: 8/15/13

### Device Information

Trade Name: MaxLock Extreme™ System

Common Name: Plates/Screws

Classification Name: Plate, Fixation, Bone and Screw, Fixation, Bone

Device Classification: Single/multiple component metallic bone fixation appliances (Class II per 21 CFR 888.3030 and 888.3040)  
Panel: Orthopedic, Product Code: HRS/HWC

Predicate Device: The MaxLock Extreme™ System is equivalent to K123203.

Material Composition: Titanium Alloy, PEEK

Device Description: The MaxLock Extreme™ System consists of various size plates and screws used to stabilize and aid in the fusion or repair of fractured bones and bone fragments. The plates are offered in different lengths and sizes. The screws are offered in different diameters and lengths. All implantable components are manufactured from implant grade titanium alloy or PEEK.

Indications for Use: The MaxLock Extreme™ System plates and screws are indicated for the following:

- The MaxLock Extreme™ Universal Module is indicated for use in adult or pediatric patients as indicated for pelvic, small and long bone fracture fixation and fixation of bones that have been surgically prepared (osteotomy) for correction of deformity or arthrodesis. Indications for use include internal fixation of the tibia, fibula, femur, humerus, ulna, radius, and bones in the hand, wrist, foot and ankle.
- The MaxLock Extreme™ Clavicle Module is indicated for fractures, fusions and osteotomies of the clavicle and bones in the hand, wrist, foot and ankle.
- The MaxLock Extreme™ Foot Module is indicated for fractures, fusions and osteotomies of bones in the hand, wrist, foot and ankle in pediatric and adult patients.
- The MaxLock Extreme™ Distal Radius Module is indicated for fractures and osteotomies of the distal radius in adult patients.

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**Substantial Equivalence:**

The new MaxLock Extreme™ System is substantially equivalent to the existing OrthoHelix MaxLock Extreme™ System (K123203). Finite element analysis was performed on the subject device to determine the worst case implant. Benchtop mechanical testing comparing the strength of the subject and predicate devices was performed and the results support substantial equivalence. Due to similarities in indications, design, and materials, no other testing was required. No new issues of safety and effectiveness have been raised.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Center – WO66-G609  
Silver Spring, MD 20993-0002

September 17, 2013

OrthoHelix Surgical Designs, Incorporated  
% Mr. Derek Lewis  
Vice President of Research and Development  
1065 Medina Road  
Suite 500  
Medina, Ohio 44256

Re: K132591

Trade/Device Name: MaxLock Extreme™ System

Regulation Number: 21 CFR 888.3030

Regulation Name: Single/multiple component metallic bone fixation appliances and accessories

Regulatory Class: Class II

Product Code: HRS, HWC

Dated: August 8, 2013

Received: August 19, 2013

Dear Mr. Lewis:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21

CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

 Laurence D. Coyne -S

for Mark N. Melkerson  
Director  
Division of Orthopedic Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K132591

Device Name: MaxLock Extreme™ System

Indications for Use:

The MaxLock Extreme System is indicated for the following:

- The MaxLock Extreme Universal Module is indicated for use in adult or pediatric patients as indicated for pelvic, small and long bone fracture fixation and fixation of bones that have been surgically prepared (osteotomy) for correction of deformity or arthrodesis. Indications for use include internal fixation of the tibia, fibula, femur, humerus, ulna, radius, and bones in the hand, wrist, foot and ankle.
- The MaxLock Extreme Clavicle Module is indicated for fractures, fusions and osteotomies of the clavicle and bones in the hand, wrist, foot and ankle.
- The MaxLock Extreme Foot Module is indicated for fractures, fusions and osteotomies of bones in the hand, wrist, foot and ankle in pediatric and adult patients.
- The MaxLock Extreme Distal Radius Module is indicated for fractures and osteotomies of the distal radius in adult patients.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter-Use             
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF  
NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Elizabeth L. Frank -S

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